

REMARKS

The claims in the application are 1, 3, 4, 6-10, 12-17 and 20-23. Claims 1,12 and 17 have been amended, claims 2 and 11 have been canceled and claims 21-23 have been added by this amendment. Support for the amendments and new claims 21-23 can be found throughout the specification and in particular at pages 6-7 and 12-14. No new matter has been added. Favorable reconsideration of the application as amended is respectfully requested.

In the Office Action claims 1, 10, 12-17 have been objected to for using the terms “connection thread” and “connecting thread” interchangeably. By way of this amendment, the term “connection thread” has been deleted and replaced with the term “connecting thread.” Accordingly, the objection to claims 1, 10, 12-17 should be reconsidered and withdrawn.

In the Office Action, claims 1-4 and 6-20 have been rejected under 35 U.S.C. § 112, second paragraph, because allegedly the meaning of the term “portions (3)” is not clear. Although the Applicants assert that this term is clear as recited in the claims, in an effort to advance prosecution, claim 1 has been amended to further define this term. In particular, claim 1 has been amended to recite that “. . .the connecting thread (2) of the three dimensionally knitted base material comprising portions(3) that extend in a sectional direction of the three dimensionally knitted base material, between the upper and lower ground structures. . . ” The Applicants respectfully assert that this

amendment further defines the meaning of the term “portions (3)” and therefore makes this term definite. Accordingly, the rejection of claims 1,3,4 and 6-10, 12-17 and 20 under 35 U.S.C. § 112, second paragraph, should be reconsidered and withdrawn. As stated above, claims 2, 11, and 18-19 have been cancelled and the rejection for these claims are now moot.

Claim 17 has also been rejected under 35 U.S.C. § 112, second paragraph, for using the transitional phrase “consisting of” where independent claim 1, the claim from which it depends, uses “comprising” language. By way of this amendment, claim 1 has been amended to recite “consisting essentially of”, while claim 17 has been amended into independent form therefore the rejection of claim 17 under 35 U.S.C. § 112, second paragraph, should be reconsidered and withdrawn.

Claim 1 has been rejected under 35 U.S.C. § 112, second paragraph for lack of antecedent basis for “the conductive layer.” By way of this amendment, the phrase “the conductive layer” has been amended to recite “the conductive metal layer” and therefore the rejection of claim 1 under 35 U.S.C. § 112, second paragraph, should be reconsidered and withdrawn.

Claims 18-19 have been rejected under 35 U.S.C. §112, first paragraph for failing to comply with the written description requirement. By way of this rejection, claims 18-19 have been cancelled without prejudice, thus this rejection is now moot.

In the Office Action, claims 1-4, 6-16 and 19-20 have been rejected under 35 U.S.C. § 102(a) as being anticipated by SHIODA et al. (WO 98/096247) published

February 12, 1998, US 6,569,789 B1 applied as an English equivalent. Claims 1-4, 6-16 and 19-20 have also been rejected under 35 U.S.C. § 102(e) as being anticipated by SHIODA et al. (US 6,569,789) which has an effective filling date of Feb. 3, 1999.

As is well settled, anticipation requires "identity of invention," *Glaverbel Societe Anonymie v. Northlake Mktg. & Supply*, 33 USPQ 2d 1496, 33 USPQ 2d 1496, 1498 (Fed. Cir. 1995). Each and every element recited in a claim must be found in a single prior art reference and arranged as in the claim. *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978); *Lindenmann Maschinenfabrik GmbH v. American Hoist and Denich Co.* 221 USPQ 481, 485 (Fed. Cir. 1984). There must be no differences between what is claimed and what is disclosed in the applied reference. *In Re Kalm*, 154 USPQ 10, 12 (CCPA 1967), *Scripps v. Genentech Inc.*, 18 USPQ 2d 1001, 1010 (Fed. Cir. 1991).

SHIODA describes the use of a foam layer in a conductive material suitable as a gasket material for shielding the electromagnetic wave. In particular, SHIODA describes a composite material composed of a synthetic fiber-structured sheet and a porous synthetic resin sheet integrally bonded to each other and is plated with metal. The fiber-structured sheets include knit cloths and organic fiber. The porous synthetic resin sheet described in SHIODA is a soft foamed sheet of three-dimensional network structure. SHIODA does not teach a resin sheet free of the soft foamed sheet of three-dimensional network structure.

As pointed out by the Examiner in the Office Action, claim 1 prior to being amended did not exclude the use of foam as a cushioning material by virtue of the fact

it used the transitional phrase "comprising". However, by way of this amendment the term "comprising" in claim 1 has been amended to "consisting essentially of" and therefore precludes the incorporation of additional components into the electromagnetic wave shielding material which would materially affect the basic and novel characteristics of the claimed electromagnetic wave shielding material.

Throughout the application, including the comparative examples and the claims, the present application describes the electromagnetic wave shielding material of the invention as being composed of a fibrous structure base material, such as a three dimensional knitted base material, and a conductive metal layer. The application specifically excludes the inclusion of a foam layer in the invention. As a result, the electromagnetic wave shielding material of the present invention exhibits good shielding properties, with metal separation being hardly observed and debris being only slightly generated when cut. In the comparative examples of the present application, it is shown that structures containing a foam layer, as in SHIODA, exhibit a moderate to significant debris generation upon cutting and a slight separation of the metal. In stark contrast, the examples that practice the invention (containing no foam) produce almost no debris when cut. This further indicates the novel structure of the present invention in part depends on NOT containing foam. (See Table 1 of the present application).

In view of the foregoing, including a foam layer in the claimed electromagnetic wave shielding material would materially affect the basic and novel characteristics of the claimed electromagnetic wave shielding material and therefore is excluded from the

claim by virtue of the "consisting essentially of" transitional language in the claims as amended. Accordingly, the rejection of claims 1, 3, 4 and 6-10, 12-16 and 20 under 35 U.S.C. § 102(a) as being anticipated by SHIODA et al. (WO 98/096247) and under 35 U.S.C. § 102(e) as being anticipated by US 6,569,789 B1 should be reconsidered and withdrawn. It is noted that, claims 2, 11, and 19 have been cancelled and the rejection for these claims are now moot.

In the Office Action, claims 19-20 have been rejected under 35 U.S.C. 102(a) SHIODA (WO 98/096247) and in the alternative over 103(a). Claim 19 has been cancelled and the rejection for this claim is now moot. Claim 20 depends from claim 1 and therefore includes all of the limitations of claim 1. Therefore, for the reasons stated above for claim 1, the rejection of claim 20 should be reconsidered and withdrawn.

Also in the Office Action, claims 1-4, 7-16 have been rejected under 35 U.S.C. §103(a) as being obvious over ROELL (US 5,589,240) in view of EBNETH (US 4, 201, 825) and in further view of EP 0748889 A2.

ROELL describes a textile spacer material, that does not contain a metal layer. In particular, ROELL describes a textile spacer material having a pile thread structure which can be used to achieve a textile material that is stated to have high absorbency, is pleasant to the skin and lists one of the preferred uses of the spacer material as being used in the area of incontinence or as a bed liner to prevent bed sores in hospitals. (Col.4, para. 2). As stated above No metal layer is taught or suggested. Instead,

the Examiner relies on EBNETH to fill this factual gap and states since "both references are directed to knitted fabrics, the purpose disclosed by EBNETH would have been recognized in the pertinent art of ROELL." (See Office Action p. 11, para.2). The respectfully disagree.

First of all, "recognizing a purpose" does not release the Examiner of his burden of demonstrating where in ROELL there is a suggestion to add a metal layer to the knitted structure, and why one would have done so. The kind of suggestion which would have "*strongly motivated*" one to make the electromagnetic wave shielding material of the present invention. *Ex parte Graselli*, 231 USPQ 393,394 (Bd. App. 1983). The type of motivation which would have "*impelled*" one to do so (*Ex parte Levengood*, 28 USPQ2d 1300, 1302 (BPAI 1992), and the type of suggestion that an electromagnetic wave shielding material having the limitations required by the claims "*should*" be made. *Ex parte Markowitz*, 143 USPQ 303, 305 (Bd. App. 1964). But that, too, is what a conclusion of obviousness requires. See *Levengood*, 28 USPQ2d at 1302. The Examiner has not addressed these elements, but without these elements, obviousness cannot be established.

In addition, the Applicants fail to see how and why one skilled in the art would combine the ROELL reference that teaches an absorbent/soft textile material used in the area of incontinence or as a bed liner to prevent bed sores in hospitals as a preferred embodiment and coat it with a metal layer to use it as an electromagnetic wave shielding material. Therefore, the suggestion and motivation to coat the

absorbent/soft textile material of SHIODA with a metal layer is simply not there. For the reasons stated above, the rejection under 35 U.S.C. 103 should be reconsidered and withdrawn.

Moreover, with regards to the heat-fusing thread of the present invention, the Examiner states that ROELL teaches that "the mechanical and physiological properties of the textile spacer material can be varied depending on the selection of thread material used." As an example, the Examiner sites to a temperature sensitive material that changes size as it is subjected to an increase in temperature. In other words, what the ROELL shows and is being relied on by the Examiner for teaching the heat-fusing thread of the present invention, is really a heat-shrinkable polymeric structure that is used to change the physical size of the textile, never to bond the threads.

In stark contrast, the heat-fusing thread of the claimed invention is dispersed throughout at least a portion of the three dimensionally knitted base material and is fuse-bonded to the three dimensionally knitted base material in at least one contacting point. This bonding pattern is not taught or suggested by ROELL and this factual gap is not filled by any of the secondary references. For this further reason, the rejection over ROELL should be reconsidered and withdrawn.

Still further, ROELL describes structures having pile thread continuously threaded throughout the spacer material. In other words, at no point in the space between the first and second covers of the spacer material taught in the ROELL is there an area "entirely void" of pile thread. (See figures 1-9).

In stark contrast, claim 1 of the present invention specifically requires that “ the portions (3) extending between the upper and lower ground structures (1,1) are entirely void of connecting thread (2) from both ground structures.” The fact that the portions (3) are “entirely void of connecting thread (2) “ is neither shown or suggested in ROELL. However, this limitation is absolutely required in order to realize the novel features of the present invention, namely minimizing cutting debris produced when the electromagnetic wave shielding material is cut in these regions. Cutting the ROELL structures would sever the pile thread and cause significant debris. This factual flaw is not rectified by the addition of either EBNETH or EP 0748889 A2 and for this further reason the rejection of claims under 35 U.S.C. §103 should be reconsidered and withdrawn.

In view of the foregoing reasons, the rejection of claims 1, 3-4, 7-10, 12-16 under 35 U.S.C. §103(a) as being obvious over ROELL (US 5,589,240) in view of EBNETH (US 4, 201, 825) and in further view of EP 0748889 A2 should be reconsidered and withdrawn. Claims 4 and 11 have been cancelled and therefore the rejection of these claims are now moot.

Accordingly, in view of the forgoing amendment, accompanying remarks, and Office Action, it is respectfully submitted all claims pending herein are in condition for allowance. Please contact the undersigned attorney should there be any questions.

This response is accompanied by a petition for a two-month extension of time and a check in the amount of \$450.00 in payment of the fee required for the extension.

Accordingly, this response is filed timely upon mailing with an executed certificate of mailing on or before April 14, 2006. 37 C.F.R § 1.8, 1.17 and 1.136.

It is not believed that this submission occasions any additional fees, however, should there be any fees, please charge the same to Deposit Account No. 04-1121. A duplicate copy of this paper is enclosed.

Early favorable action is earnestly solicited.

Respectfully submitted,



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